

HAI only
Process Sheet

Dart Aerospace Ltd.

Date: Monday, 6/19/2006 11:29:17 AM
User: Kim Johnston

Customer : CU-DAR001 Dart Helicopters Services
Job Number : 27632
Estimate Number : 10467
P.O. Number : *N/A*
This Issue : 6/19/2006 S.O. No. : *N/A*
Prsht Rev. : NC
First Issue : *N/A* Type : MACHINED PARTS
Previous Run : 26847
Written By : *[Signature]*
Checked & Approved By : *[Signature]*
Comment : Est. A 05.09.13 New issue KJ/JLM
Est. B 06.02.10 Dwg rev.D ecn 773 EC
Est. C 06.05.02 Added inspections EC

Drawing Name : FWD TUBE ASSEMBLY
Part Number : D3391021
Drawing Number : D3391 REV E
Project Number : N/A
Drawing Revision : E
Material : *N/A*
Due Date : 7/20/2006 Qty: 1 Um: Each

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 D6013047 SKIDTUBE MAT'L



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

SKIDTUBE MAT'L

Pick:

Qty	Part Number	Description	Batch
1	D6013-047	Extrusion	<i>B23935</i>

2.0 LANDING GEAR 1 LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1
Cut extrusion to 46.52 +0.010 -0.020

N/A JLD

3.0 BENDING BENDING MACHINE



Comment: Nc bender
Bend as per Dwg D3391 Using Bend Prog 3391021

DD06-06-22

4.0 QC5 INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

BE 06-06-22

5.0 HAAS1 HAAS CNC VERTICAL MACHINING #1



Comment: HAAS CNC VERTICAL MACHINING #1

1-Machine as per Folio FA590 Rev. *AA* & Dwg D3391 Rev. *E*
Identify as D3391-1

2-Deburr

ml 06/07/10

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector	

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

NOTE: Date & initial all entries

QA: N/C Closed: _____ Date: _____

Date: Monday, 6/19/2006 11:29:17 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FWD TUBE ASSEMBLY

Job Number: 27632

Part Number: D3391021

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC2

INSPECT PARTS AS THEY COME OFF MACHINE



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

mk 06/07/10 1

7.0

QC8

SECOND CHECK



Comment: SECOND CHECK

J.G 06/08/03 1

8.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Drill and c/sink float bag holes as per Dwg D3391 using DT8798(Do not open tow cap holes to finish size)
(ONLY DRILL HOLES MARKED "A") *BE 06-08-28*

2-Drill Remaining two holes for tow cap using DT 8819 Locating off of .1875" holes drilled in previous step *BE 06-08-28*

3-Open tow cap holes to .208" as per Dwg D3391 *BE 06-08-28*

4-Open Tow Ring hole to .640" as per Dwg D3391 *BE 06-08-28*

5-Drill wearplate holes as per Dwg D3391 Using Dt8217 & DT8878 *pm 06-08-29 ①*

6--Deburr *pm 06-08-29 ①*

9.0

QC5

INSPECT WORK TO CURRENT STEP



DP 6-8-30



Comment: INSPECT WORK TO CURRENT STEP

10.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Acid etch and Alodine as per QSI 005 4.1 *M.R 06/10/14 ①*

11.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

am 07/02/12 ①

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector	

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

NOTE: Date & initial all entries QA: N/C Closed: _____ Date: _____

Date: Monday, 6/19/2006 11:29:18 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FWD TUBE ASSEMBLY

Job Number: 27632

Part Number: D3391021

Job Number:



Seq. #:

Machine Or Operation:

Description :

12.0

POWDER COATING

POWDER COATING



m103/41



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

FR/YL

07/02/13

①

13.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

a.m

07/02/13

①

14.0

NAS1330C3KB166

INSERT



Comment: Qty.: 14.0000 Each(s)/Unit Total : 14.0000 Each(s)

Rivnut

Pick:

Qty	Part Number	Description	Batch
14	NAS1330C3KB166	Insert	<i>m19349</i>

a.m

07/02/13

①

15.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Install Inserts as per Dwg

a.m

07/02/13

①

16.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

m 07 02 13

①

17.0

D3401041

Tow Cap Assembly



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Tow Cap Assembly

Pick:

Qty	Part Number	Description	Batch
1	D3401-041	Tow Cap	<i>B29214</i>

18.0

AN3C4A

BOLT



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Bolt

Pick:

Qty	Part Number	Description	Batch
4	AN3C4A	Bolt	<i>m101390</i>

a.m 07/02/14

①

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector	

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

NOTE: Date & initial all entries

QA: N/C Closed: _____ Date: _____

Date: Monday, 6/19/2006 11:29:18 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FWD TUBE ASSEMBLY

Job Number: 27632

Part Number: D3391021

Job Number:



Seq. #:

Machine Or Operation:

Description :

19.0

NAS1515H3L

WASHER



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Washer

Pick:

Qty	Part Number	Description	Batch
4	NAS1515H3L	Washer	M103481

20.0

AN960C10L

washer



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

washer

M 103344

21.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Install tow Cap as per Dwg D3391

Identify as D3391-021

a.m 07/02/14 ①

22.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

Inspect thread of each insert using DT8821

07.02.14

23.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

07.02.14

24.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Inspection Level 21

HAI only

Job Completion



u 07.02.14

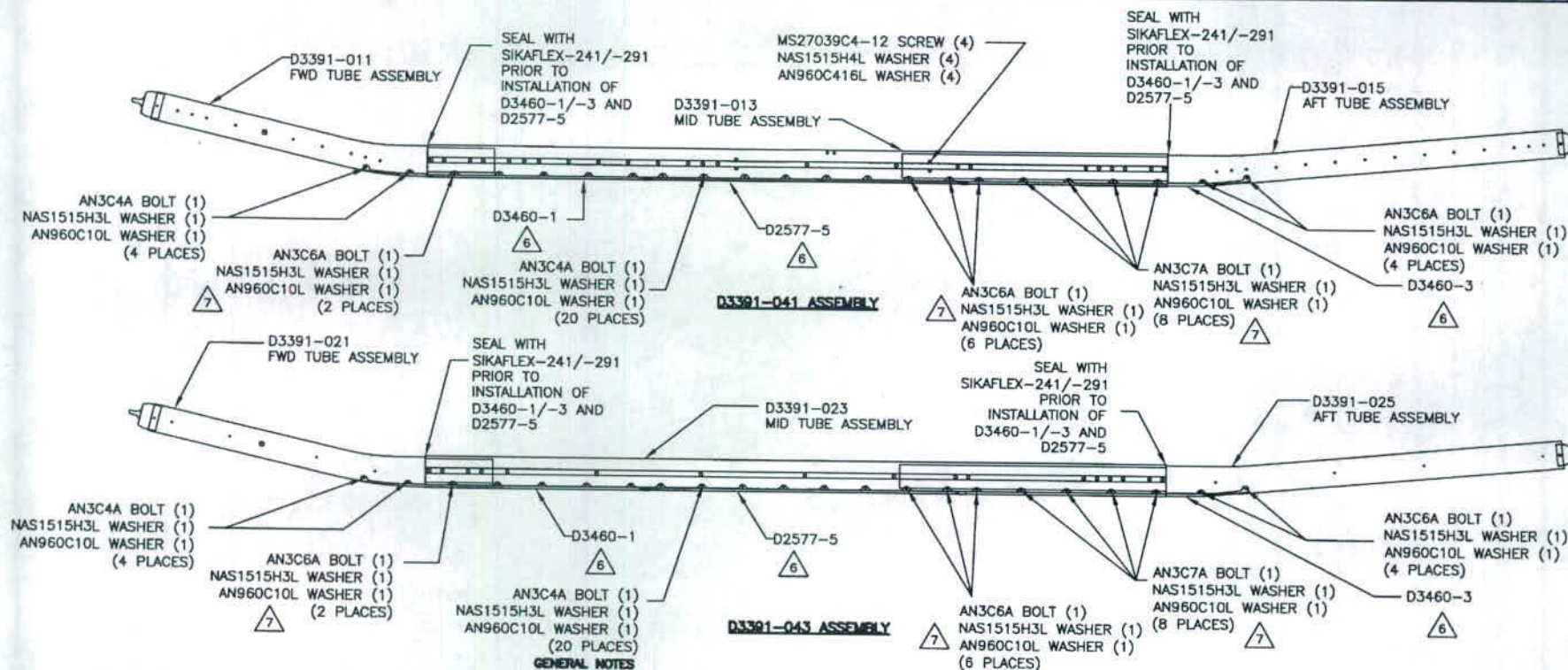
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector	

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

NOTE: Date & initial all entries

QA: N/C Closed: _____ Date: _____



D3391-041/-043 FLOAT SKIDTUBE ASSEMBLY PARTS LIST

QTY - 041	QTY - 043	PART NUMBER	DESCRIPTION
X	X	D3391-041	FLOAT SKIDTUBE ASSEMBLY
		D3391-043	FLOAT SKIDTUBE ASSEMBLY
1		D3391-011	FWD TUBE ASSEMBLY
1		D3391-013	MID TUBE ASSEMBLY
1		D3391-015	AFT TUBE ASSEMBLY
	1	D3391-021	FWD TUBE ASSEMBLY
	1	D3391-023	MID TUBE ASSEMBLY
	1	D3391-025	AFT TUBE ASSEMBLY
24	24	AN3C4A	BOLT
12	12	AN3C6A	BOLT
8	8	AN3C7A	BOLT
44	44	NAS1515H3L	WASHER
44	44	AN960C10L	WASHER
4		MS27039C4-12	SCREW
4		NAS1515H4L	WASHER
4		AN960C416L	WASHER
1	1	D2577-5	WEARSHOE
1	1	D3460-1	WEARSHOE
1	1	D3460-3	WEARSHOE

- GENERAL NOTES**
- ALL DIMENSIONS ARE IN INCHES
 - TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
 - FINISH: ACID ETCH AND ALODINE PER DART QSI 005 4.1
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
 - SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY. CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.
 - USE DART DRILL TEMPLATE DT8217 TO LOCATE AND DRILL "E" SIZE HOLES (#0.250-#0.257) FOR WEARSHOE INSERTS.
C/SINK #0.391/#0.425 x 100" AS APPLICABLE AND INSTALL INSERTS EXCEPT WHERE INDICATED.
 - APPLY A LAYER OF SIKAFLEX -241/-291 ADHESIVE BETWEEN THE BOTTOM OF THE SKIDTUBE ASSEMBLY AND THE WEARPLATES
 - DO NOT TORQUE, HAND TIGHTEN ONLY

RELEASED

06-05-03

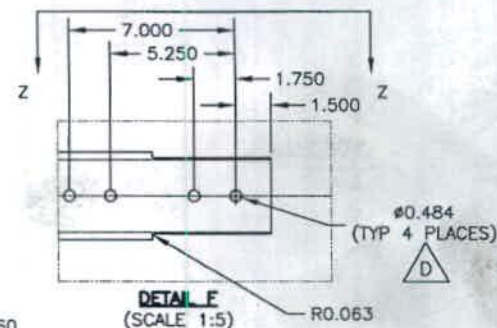
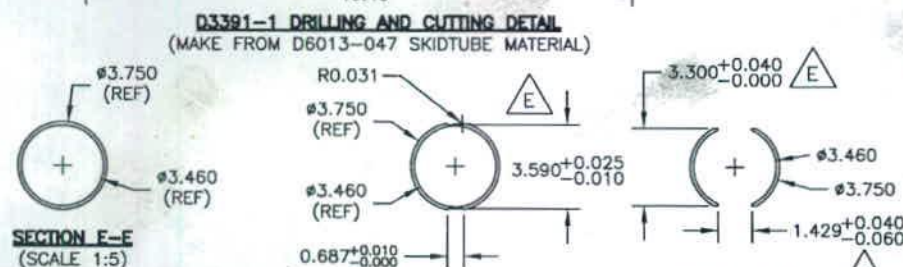
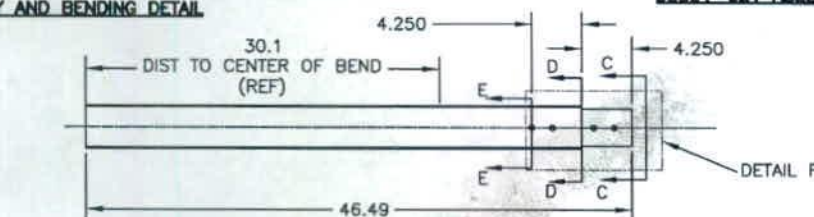
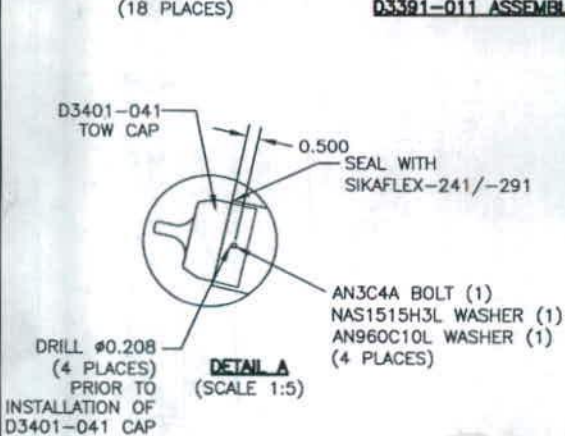
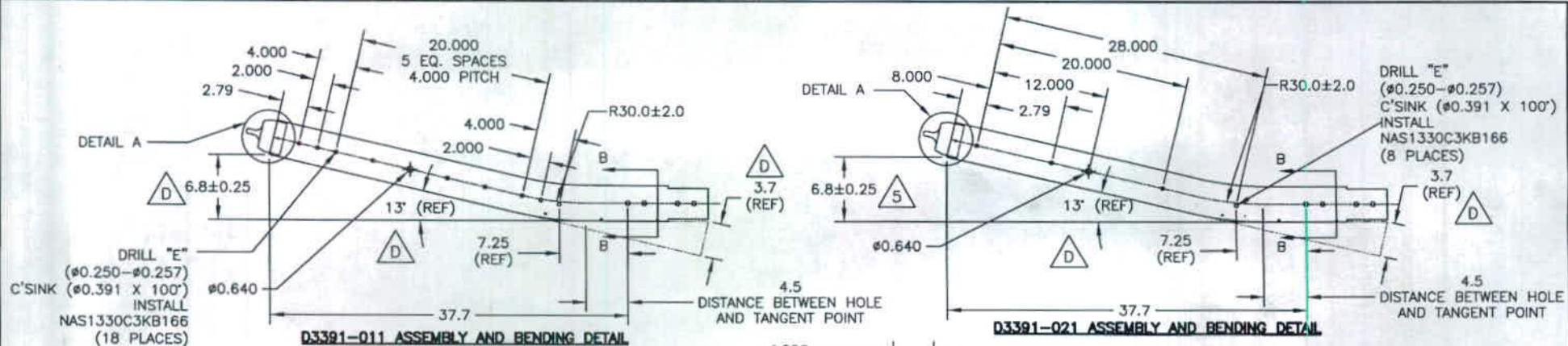
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E	06.04.25	CHANGE TOLERANCE, EASE MANUFACTURE
D	06.01.23	UPDATE TOLERANCE, CHANGE HOLE SIZE
C	05.09.27	LENGTHEN AFT EXTENSION
B	05.06.10	DRAWING UPDATES
A	05.02.07	NEW ISSUE
DESIGN	PH	DRAWN BY PH
CHECKED	PH	APPROVED PH
DATE	06.04.25	TITLE
		412 FLOAT SKIDTUBE
		REV. E
		SHEET 1 OF 3
		SCALE
		NTS

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WORK ORDER
NO. 27632



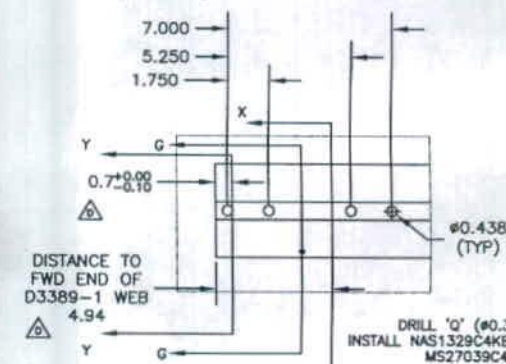
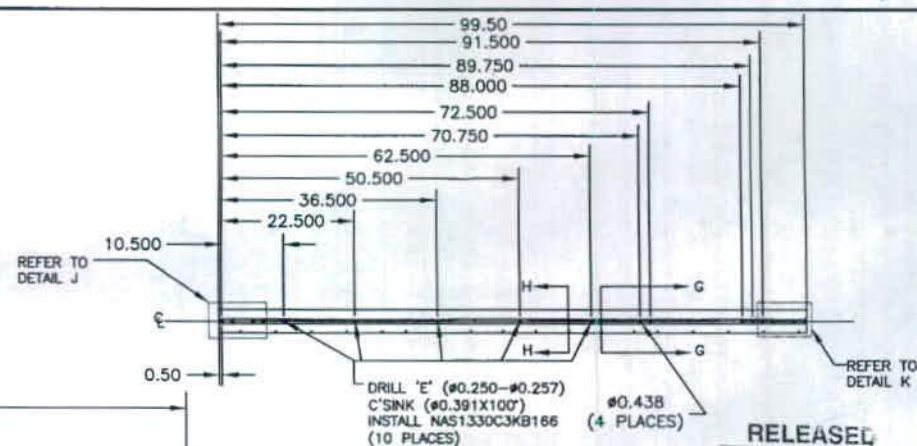
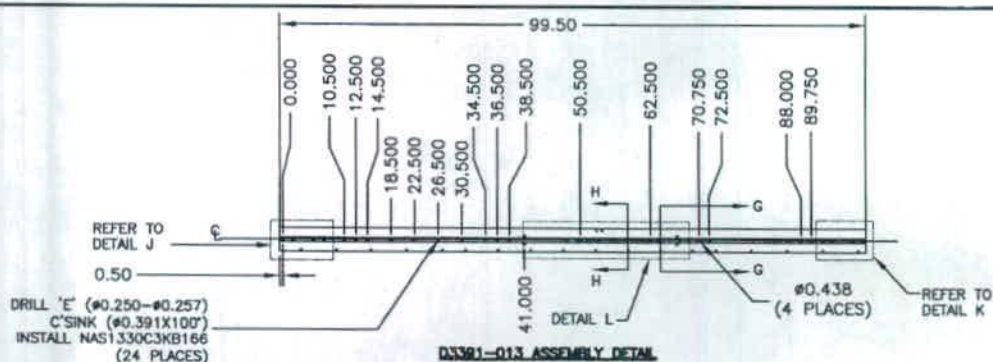
D3391-011/-021 FWD TUBE ASSEMBLY PARTS LIST

QTY - 011	QTY - 021	PART NUMBER	DESCRIPTION
X	X	D3391-011	FWD TUBE ASSEMBLY
		D3391-021	FWD TUBE ASSEMBLY
1	1	D6013-047	FWD TUBE
1	1	D3401-041	TOW CAP
4	4	AN3C4A	BOLT
4	4	NAS1515H3L	WASHER
4	4	AN960C10L	WASHER
24	14	NAS1330C3KB166	INSERT

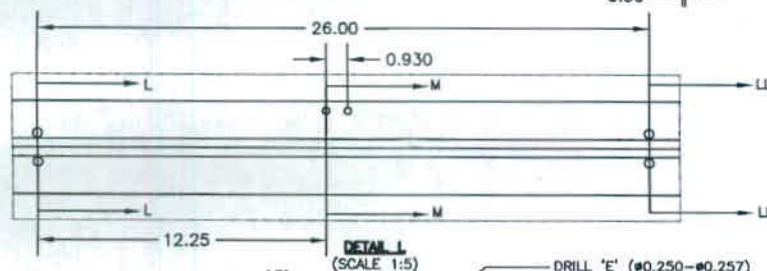


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CHECKED PH APPROVED PH DRAWING NO. D3391
DATE 06.04.25 TITLE 412 FLOAT SKIDTUBE
REV. E SHEET 2 OF 5 SCALE 1:10

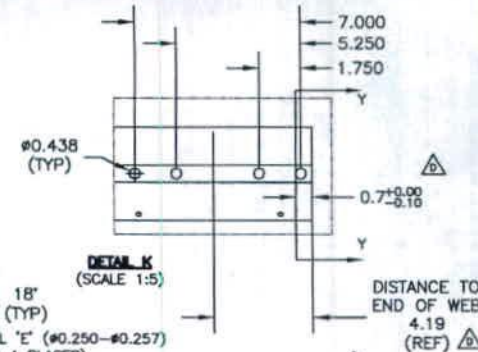
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FOR TO



DRILL 'Q' (#0.332-#0.338)
INSTALL NAS1329C4KB140 INSERT
MS27039C4-08 SCREW
NAS1515H4L WASHER
AN960C416L WASHER
(TYP 4 PLACES)



DRILL 'E' (#0.250-#0.257)
C'SINK (#0.391X100)
INSTALL NAS1330C3KB166 INSERT
MS27039C1-09 SCREW
NAS1515H3L WASHER
AN960C10L WASHER
(TYP 4 PLACES)

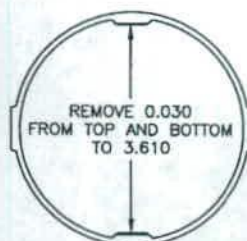


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D3391-013/-023 MID TUBE ASSEMBLY PARTS LIST

QTY - 013	QTY - 023	PART NUMBER	DESCRIPTION
X	X	D3391-013	MID TUBE ASSEMBLY
		D3391-023	MID TUBE ASSEMBLY
1	1	D2500-1-100	EXTRUSION
1	1	D3389-1	WEB
24	20	NAS1330C3KB116	INSERT
24	10	NAS1330C3KB166	INSERT
4		NAS1329C4KB140	INSERT
4		NAS1515H3L	WASHER
4		AN960C10L	WASHER
4		NAS1515H4L	WASHER
4		AN960C416L	WASHER
4		MS27039C1-09	SCREW
4		MS27039C4-08	SCREW

SECTION L-L
(SCALE 1:4)



SECTION M-M
(SCALE 1:4)

REMOVE 0.225
FROM TOP AND BOTTOM
TO 3.800
(0.7 FROM BOTH ENDS)

SECTION N-N
(SCALE 1:4)



SECTION Y-Y
(SCALE 1:4)

SECTION G-G
(SCALE 1:4)

SECTION H-H
(SCALE 1:4)

D3391-013/-023 MID TUBE ASSEMBLY

- MATERIAL: MAKE FROM D2500-1-100 EXTRUSION
- INSTALL D3389-1 WEB TO OUTER TUBE USING SIKAFLEX-241/-291 PER QSI 015

SECTION X-X
(SCALE 1:2)

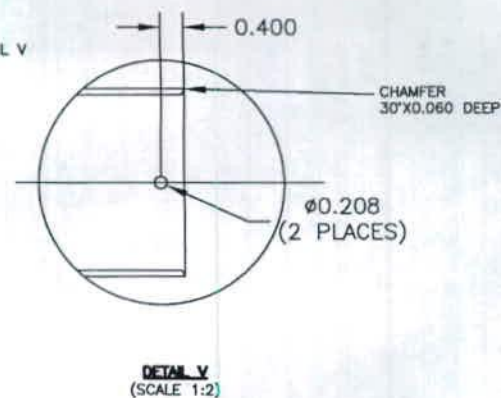
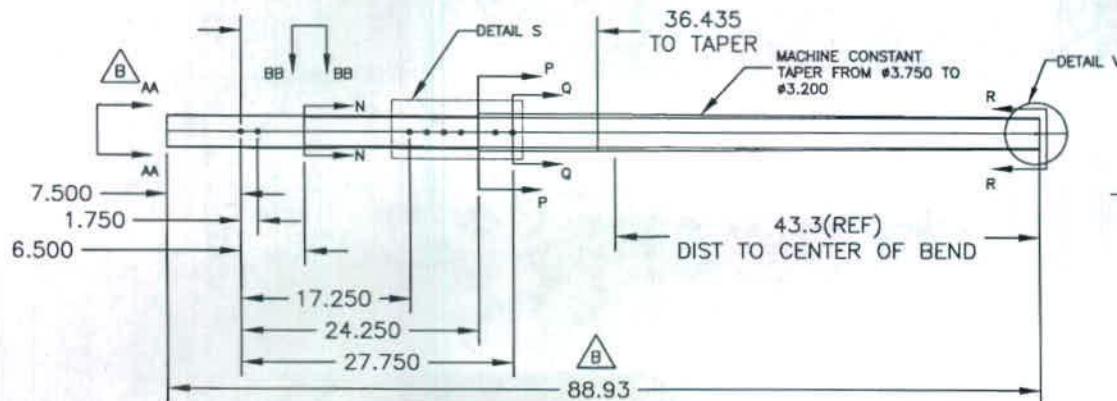
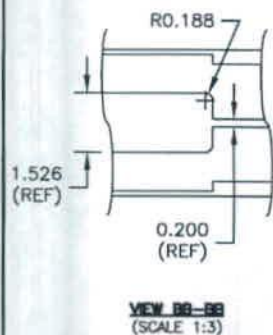


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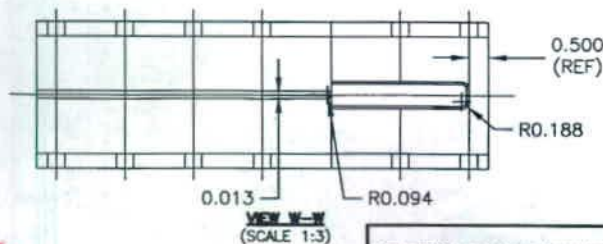
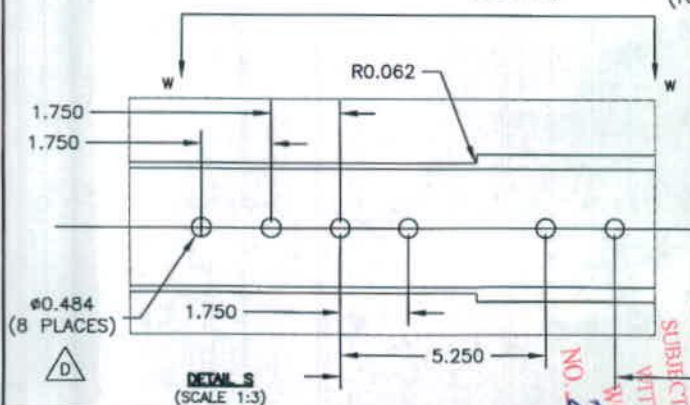
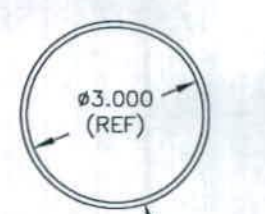
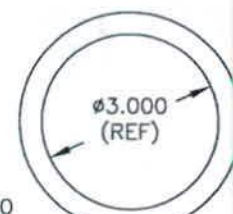
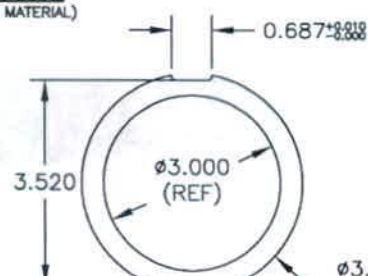
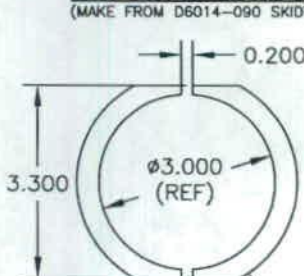
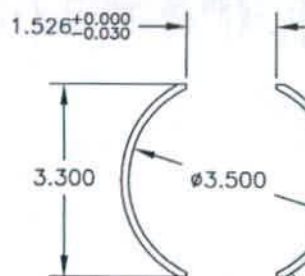
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CHECKED H	APPROVED H	DRAWING NO. D3391	SHEET 3 OF 5
DATE 06.04.25	TITLE 412 FLOAT SKIDTUBE	SCALE 1:20	

WORK ORDER
27632
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D3391-3 AFT DRILLING AND CUTTING DETAIL
(MAKE FROM D6014-090 SKIDTUBE MATERIAL)



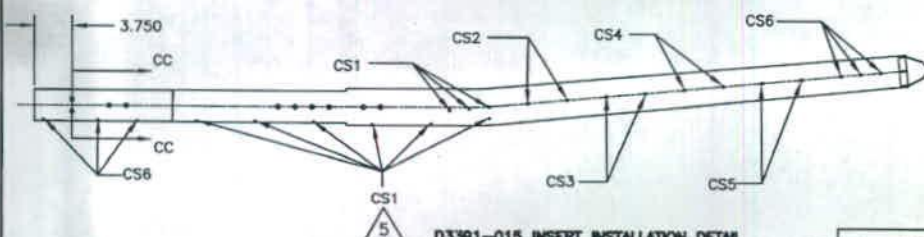
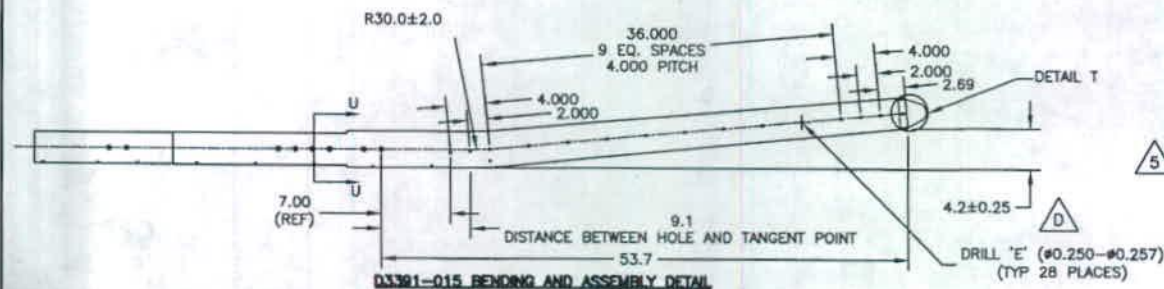
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DESIGN	PH	DRAWN BY	PH	DART DART AEROSPACE USA, INC. PORT HANCOCK, ME	REV. E
CHECKED	PH	APPROVED	PH	DRAWING NO. D3391	SHEET 4 OF 5
DATE	06.04.25	TITLE	412 FLOAT SKIDTUBE	SCALE	1:12

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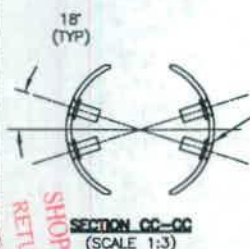
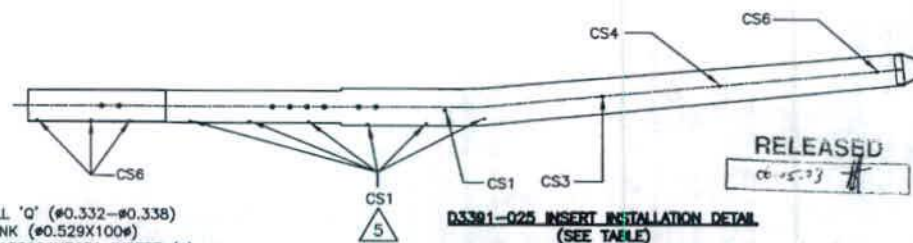
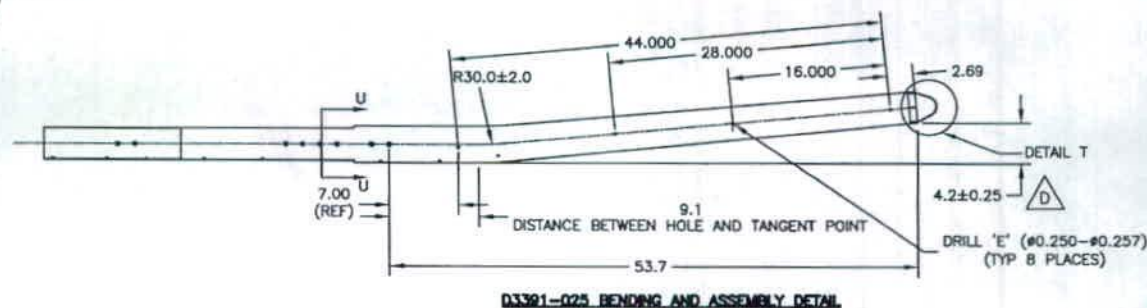


C'SINK AND INSTALL AESS10KBXXX AND/OR NAS1330C3KBXXX IN HOLES MARKED CS1-CS6 AS FOLLOWS

HOLES MARKED	QTY D3391-015	QTY D3391-025	C'SINK	P/N
CS1	18	14	Ø0.425	AESS10KB396
CS2	4	2	Ø0.391	AESS10KB396
CS3	4	2	Ø0.391	NAS1330C3KE316
CS4	4	2	Ø0.391	NAS1330C3KE2E6
CS5	4	2	Ø0.391	NAS1330C3KE216
CS6	12	8	Ø0.391	NAS1330C3KE1E6

D3391-015/-025 AFT TUBE ASSEMBLY PARTS LIST

QTY - 015	QTY - 025	PART NUMBER	DESCRIPTION
X		D3391-015	AFT TUBE ASSEMBLY
	X	D3391-025	AFT TUBE ASSEMBLY
1	1	D6014-090	AFT TUBE
1	1	D2646	AFT CAP
18	14	AESS10KB396	INSERT
4	2	NAS1330C3KB316	INSERT
4	2	NAS1330C3KB266	INSERT
4	2	NAS1330C3KB216	INSERT
12	8	NAS1330C3KB166	INSERT
4	2	NAS1330C4KB151	INSERT
2	2	AN3C4A	BOLT
2	2	NAS1515H3L	WASHER
2	2	AN960C10L	WASHER



DRILL 'Q' (#0.332-#0.338)
C'SINK (#0.529X100#)
NAS1330C4KB151 INSERT (1)
(4 PLACES)

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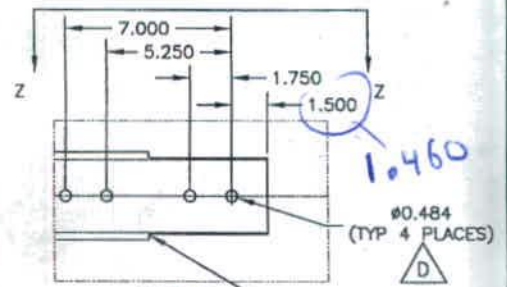
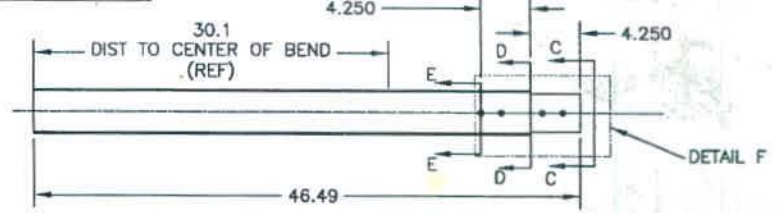
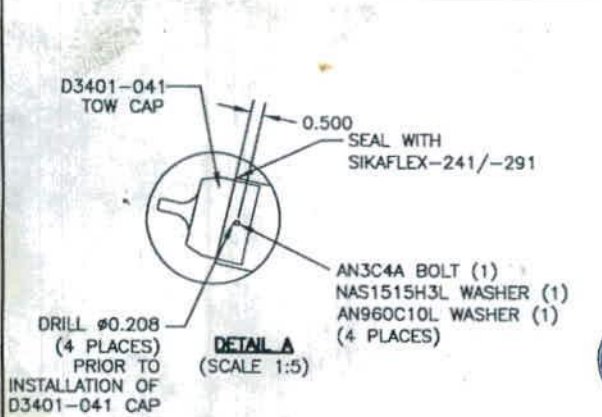
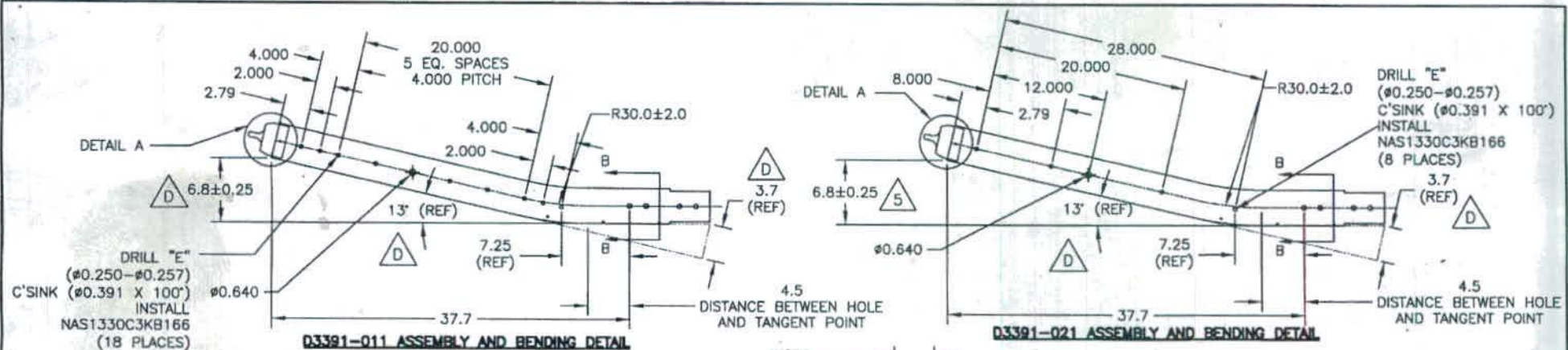
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DESIGN	PH	DRAWN BY	PH	DART DART AEROSPACE USA, INC. FORT WALDEN, NH
CHECKED		APPROVED		DRAWING NO. D3391
DATE	06.04.25	TITLE	412 FLOAT SKIDTUBE	REV. E SHEET 5 OF 5 SCALE 1:12

NO. 27632
WORK ORDER
SUBJECT TO AMENDMENT
WITHOUT NOTICE
ENGINEERING
UNCONTROLLED COPY
RETURN TO
SHOP COPY

RELEASED
06.05.03

555



RELEASED
06.05.03

D3391-011/-021 FWD TUBE ASSEMBLY PARTS LIST

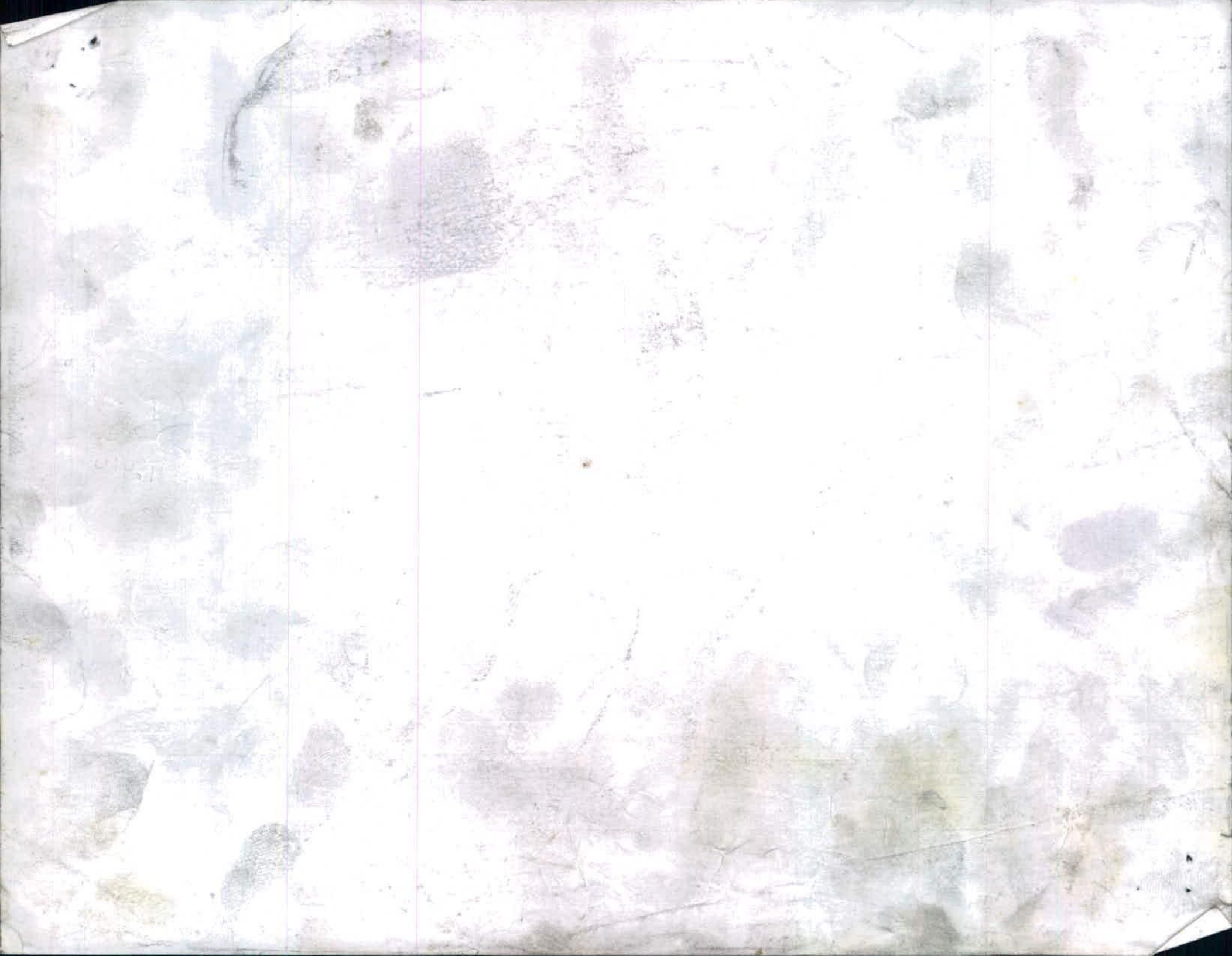
QTY - 011	QTY - 021	PART NUMBER	DESCRIPTION
X		D3391-011	FWD TUBE ASSEMBLY
	X	D3391-021	FWD TUBE ASSEMBLY
1	1	D8013-047	FWD TUBE
1	1	D3401-041	TOW CAP
4	4	AN3C4A	BOLT
4	4	NAS1515H3L	WASHER
4	4	AN960C10L	WASHER
24	14	NAS1330C3KB166	INSERT

NO. 21632
WORK ORDER
UNCONTROLLED COPY
ENGINEERING
SUBJECT TO AMENDMENT
WITHOUT NOTICE
COPY TO
TURN TO
P. COPY

5
DRILL "E"
(#0.250-#0.257)
C'SINK (#0.391 X 100")
INSTALL
NAS1330C3KB166
(6 PLACES)

DESIGN PH		DRAWN BY PH		DART DART AEROSPACE USA, INC. PORT HADLOCK, OH	
CHECKED #	APPROVED #	DRAWING NO. D3391		REV. E	
DATE 06.04.25		TITLE 412 FLOAT SKIDTUBE		SHEET 2 OF 3	
				SCALE 1:10	

47.075" avant.



Date: 6/23/2006 8:53AM
User: Linda Lacelle

PROCESS SHEET

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: FWD TUBE ASSEMBLY
Job No.	: 27675	Part No.	: D3391021
Estimate No.	: 10467	Drawing No.	: D3391 REV E
P.O. No.	: <u>N/A</u> SO No. <u>N/A</u>	Drawing Rev.	: E
First Issue	: 11	Project No.	: N/A
Prsht Rev.	: NC Type : MACHINED PARTS	Material	: <u>N/A</u>
This Issue	: 6/23/2006	Due Date	: 7/15/2006 QTY: 1
Prev. Run	: 27674		

Written by:

Checked & Approved by:

Comment :

Est. A 05.09.13 New issue KJ/JLM
Est. B 06.02.10 Dwg rev.D ecn 773 EC
Est. C 06.05.02 Added inspections EC

Job Number:



Seq. No.	Machine or Operation	Description
1.0	D6013047	SKIDTUBE MAT'L
	Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s) SKIDTUBE MAT'L Pick: Qty Part Number Description Batch 1 D6013-047 Extrusion <u>B23935 DP06-6-23</u>	
2.0	LANDING GEAR 1	LANDING GEAR RESOURCE 1
	Comment: LANDING GEAR RESOURCE 1 Cut extrusion to 46.52 +0.010 -0.020 <u>ml 06/06/23</u> 1	
3.0	BENDING	BENDING MACHINE
	Comment: Nc bender Bend as per Dwg D3391 Using Bend Prog 3391021 <u>DP06-6-23</u>	
4.0	QC5	INSPECT WORK TO CURRENT STEP
	Comment: INSPECT WORK TO CURRENT STEP <u>Pm 06-06-23</u>	
5.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
	Comment: HAAS CNC VERTICAL MACHINING #1 1-Machine as per Folio FA590 Rev. <u>FA</u> & Dwg D3391 Rev. <u>E</u> Identify as D3391-1 <u>ml 06/07/10</u> 1 2-Deburr	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Job Number:



Seq. No.	Machine or Operation	Description
6.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
	Comment: INSPECT PARTS AS THEY COME OFF MACHINE	<i>7ml 06/07/10</i>
7.0	QC8	SECOND CHECK
	Comment: SECOND CHECK	<i>3.6 06/08/03</i>
8.0	LANDING GEAR 1	LANDING GEAR RESOURCE 1
	Comment: LANDING GEAR RESOURCE 1	
	1-Drill and c'sink float bag holes as per Dwg D3391 using DT8798(Do not open tow cap holes to finish size) (ONLY DRILL HOLES MARKED "A")	
	2-Drill Remaining two holes for tow cap using DT 8819 Locating off of .1875" holes drilled in previous step	
	3-Open tow cap holes to .208" as per Dwg D3391	
	4-Open Tow Ring hole to .640" as per Dwg D3391	
	5-Drill wearplate holes as per Dwg D3391 Using Dt8217 & DT8878	
	6-Deburr	
9.0	QC5	INSPECT WORK TO CURRENT STEP
	Comment: INSPECT WORK TO CURRENT STEP	<i>DPG-8-30</i>
10.0	HAND FINISHING1	HAND FINISHING RESOURCE #1
	Comment: HAND FINISHING RESOURCE #1	
	Acid etch and Alodine as per QSI 005 4.1	
11.0	QC3	INSPECT POWDER COAT/CHEMICAL CONVERSION
	Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION	<i>a.m 06-08-30</i>
12.0	POWDER COATING	POWDER COATING
	Comment: POWDER COATING	
	Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3	
13.0	QC3	INSPECT POWDER COAT/CHEMICAL CONVERSION
	Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION	<i>DL 06/08/31</i>
14.0	NAS1330C3KB166	INSERT

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Job Number:



Seq. No.	Machine or Operation	Description
	Comment: Qty.: 14.0000 Each(s)/Unit Total: 14.0000 Each(s) Rivnut Pick: Qty Part Number Description Batch 14 NAS1330C3KB166 Insert <u>M100732</u>	<i>check Inv, DL 06/08/31</i>
15.0	HAND FINISHING1	HAND FINISHING RESOURCE #1
	Comment: HAND FINISHING RESOURCE #1 Install Inserts as per Dwg	<i>DL 06/09/01 (1)</i>
16.0	QC5	INSPECT WORK TO CURRENT STEP
	Comment: INSPECT WORK TO CURRENT STEP	<i>DL 06/08/31 (1)</i>
17.0	D3401041	Tow Cap Assembly
	Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s) Tow Cap Assembly Pick: Qty Part Number Description Batch 1 D3401-041 Tow Cap <u>26881</u>	<i>FC</i>
18.0	AN3C4A	BOLT
	Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s) Bolt Pick: Qty Part Number Description Batch 4 AN3C4A Bolt <u>101390</u>	<i>FC</i>
19.0	NAS1515H3L	WASHER
	Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s) Washer Pick: Qty Part Number Description Batch 4 NAS1515H3L Washer <u>101340</u>	<i>FC</i>
20.0	AN960C10L	washer
	Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s) washer	<i>101340 FC</i>
21.0	HAND FINISHING1	HAND FINISHING RESOURCE #1
	Comment: SMALL & MEDIUM FAB RESOURCE 1 Install tow Cap as per Dwg D3391 Identify as D3391-021	<i>FC 06/10/10</i>
22.0	QC5	INSPECT WORK TO CURRENT STEP
	Comment: INSPECT WORK TO CURRENT STEP Inspect thread of each insert using DT8821	<i>06/10/11</i>

Job Number:



Seq. No.	Machine or Operation	Description
23.0	PACKAGING 1	PACKAGING RESOURCE #1
	Comment: PACKAGING RESOURCE #1 Identify and Stock Location: <i>N/A</i>	<i>FE 06 10 11 ①</i>
24.0	DC	DOCUMENT CONTROL
	Comment: DOCUMENT CONTROL Inspection Level 21	<i>② 06/10/11 ①</i>

Job Completion



U 26.10.11

Date: 6/23/2006 8:57AM
User: Linda Lacelle

PROCESS SHEET

Customer : CU-DAR001 Dart Helicopters Services
Job No. : 27673
Estimate No. : 10467
P.O. No. : *N/A* SO No. : *N/A*
First Issue : *1/1*
Prsht Rev. : NC Type : MACHINED PARTS
This Issue : 6/23/2006
Prev. Run : 27635

Drawing Name : FWD TUBE ASSEMBLY
Part No. : D3391021
Drawing No. : D3391 REV E
Drawing Rev. : E
Project No. : N/A
Material : *N/A*
Due Date : 7/15/2006 QTY: 1

Written by: _____

Checked & Approved by: _____

Comment :

Est. A 05.09.13 New issue KJ/JLM
Est. B 06.02.10 Dwg rev. D ecn 773 EC
Est. C 06.05.02 Added inspections EC

Job Number:



Seq. No.	Machine or Operation	Description
1.0	D6013047	SKIDTUBE MAT'L
	Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s) SKIDTUBE MAT'L Pick: Qty Part Number Description Batch 1 D6013-047 Extrusion <i>B23935 DP06-6-23</i>	
2.0	LANDING GEAR 1	LANDING GEAR RESOURCE 1
	Comment: LANDING GEAR RESOURCE 1 Cut extrusion to 46.52 +0.010 -0.020 <i>ml 06/06/23</i>	
3.0	BENDING	BENDING MACHINE
	Comment: Nc bender Bend as per Dwg D3391 Using Bend Prog 3391021 <i>DP06-6-23</i>	
4.0	QC5	INSPECT WORK TO CURRENT STEP
	Comment: INSPECT WORK TO CURRENT STEP <i>Pm 06-06-23</i>	
5.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
	Comment: HAAS CNC VERTICAL MACHINING #1 1-Machine as per Folio FA590 Rev. <i>AA</i> & Dwg D3391 Rev. <i>E</i> Identify as D3391-1 2-Deburr <i>ml 06/07/10</i>	

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector	

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

NOTE: Date & initial all entries

QA: N/C Closed: _____ Date: _____



W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector	

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

NOTE: Date & initial all entries

QA: N/C Closed: _____ Date: _____

Job Number:



Seq. No.	Machine or Operation	Description
6.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
	Comment: INSPECT PARTS AS THEY COME OFF MACHINE	<i>ml 06/07/10</i>
7.0	QC8	SECOND CHECK <i>5.6 06/08/03</i>
	Comment: SECOND CHECK	
8.0	LANDING GEAR 1	LANDING GEAR RESOURCE 1
	Comment: LANDING GEAR RESOURCE 1	
	1-Drill and c/sink float bag holes as per Dwg D3391 using DT8798(Do not open tow cap holes to finish size) (ONLY DRILL HOLES MARKED "A")	<i>pm 06-08-280</i>
	2-Drill Remaining two holes for tow cap using DT 8819 Locating off of .1875" holes drilled in previous step	<i>pm 06-08-280</i>
	3-Open tow cap holes to .208" as per Dwg D3391	<i>pm 06-08-280</i>
	4-Open Tow Ring hole to .640" as per Dwg D3391	<i>pm 06-08-280</i>
	5-Drill wearplate holes as per Dwg D3391 Using D18217 & DT8878	<i>pm 06-08-280</i>
	6-Deburr	<i>pm 06-08-290</i>
9.0	QC5	INSPECT WORK TO CURRENT STEP
	Comment: INSPECT WORK TO CURRENT STEP	<i>DP 6-8-30</i>
10.0	HAND FINISHING1	HAND FINISHING RESOURCE #1
	Comment: HAND FINISHING RESOURCE #1 Acid etch and Alodine as per QSI 005 4.1	<i>a.m 06-08-30</i>
11.0	QC3	INSPECT POWDER COAT/CHEMICAL CONVERSION
	Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION	<i>06-08-31</i>
12.0	POWDER COATING	POWDER COATING
	Comment: POWDER COATING Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3	<i>DL 06/09/10</i>
13.0	QC3	INSPECT POWDER COAT/CHEMICAL CONVERSION
	Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION	<i>06-08-31</i>
14.0	NAS1330C3KB166	INSERT

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector	

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

NOTE: Date & initial all entries

QA: N/C Closed: _____ Date: _____

Job Number:



Seq. No.	Machine or Operation	Description
	Comment: Qty.: 14.0000 Each(s)/Unit Total: 14.0000 Each(s) Rivnut Pick: Qty Part Number Description Batch 14 NAS1330C3KB166 Insert <u>M100732</u> <i>check Inv. DL 06/08/31 (1)</i>	
15.0	HAND FINISHING1	HAND FINISHING RESOURCE #1
	Comment: HAND FINISHING RESOURCE #1 Install Inserts as per Dwg <i>DL 06/08/31 (1)</i>	
16.0	QC5	INSPECT WORK TO CURRENT STEP
	Comment: INSPECT WORK TO CURRENT STEP <i>MA 06/08/31 (1)</i>	
17.0	D3401041	Tow Cap Assembly
	Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s) Tow Cap Assembly Pick: Qty Part Number Description Batch 1 D3401-041 Tow Cap <u>B26881</u>	
18.0	AN3C4A	BOLT
	Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s) Bolt Pick: Qty Part Number Description Batch 4 AN3C4A Bolt <u>M101390</u>	
19.0	NAS1515H3L	WASHER
	Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s) Washer Pick: Qty Part Number Description Batch 4 NAS1515H3L Washer <u>M101340</u>	
20.0	AN960C10L	washer
	Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s) washer <i>Q.M 06-08-31 (1)</i> <u>M100786</u>	
21.0	HAND FINISHING1	HAND FINISHING RESOURCE #1
	Comment: SMALL & MEDIUM FAB RESOURCE 1 Install tow Cap as per Dwg D3391 Identify as D3391-021 <i>Q.M 06-09-31 (1)</i>	
22.0	QC5	INSPECT WORK TO CURRENT STEP
	Comment: INSPECT WORK TO CURRENT STEP Inspect thread of each insert using DT8821 <i>L 06-10-03 (1)</i>	

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector	

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☐ No ☒ DQA: ☒ Date: 06/10/06

NOTE: Date & initial all entries

QA: N/C Closed: _____ Date: _____

Job Number:



Seq. No.	Machine or Operation	Description
23.0	PACKAGING 1	PACKAGING RESOURCE #1
	Comment: PACKAGING RESOURCE #1 Identify and Stock Location: _____	
24.0	DC	DOCUMENT CONTROL
	Comment: DOCUMENT CONTROL Inspection Level 21	

Job Completion



U 06/10/05

DP 06/10/06

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector	

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

NOTE: Date & initial all entries

QA: N/C Closed: _____ Date: _____

DART AEROSPACE LTD		Work Order: 27673
Description: Float Skidtube (412)		Part Number: D3391-1
Inspection Dwg: D3391	Rev: E	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.687	+0.010/-0.000	0.692	✓			
3.590	+0.025/-0.010	3.609	✓			
3.300	+0.040/-0.000	3.330	✓			
1.429	+0.040/-0.060	1.395	✓			
4.250	+/-0.010	4.255	✓			
4.250	+/-0.010	4.243	✓			
1.500	+/-0.010	1.500	✓			
1.750	+/-0.010	1.750	✓			
5.250	+/-0.010	5.248	✓			
7.000	+/-0.010	7.004	✓			
Ø0.484	+0.006/-0.001	Ø0.484	✓			

Measured by: JML	Audited by: J.G	Prototype Approval: N/A
Date: 06/07/10	Date: 06/08/03	Date: N/A

Rev	Date	Change	Revised by	Approved
A	06.04.27	New Issue P/O D3391-011/-021	KJ/JLM	
B	06.06.19	Tolerances revised per D3391 Rev. E	KJ/JLM	

